CHAPTER 1

Introduction and Purpose and Need for Agency Action

This chapter introduces Sandia National Laboratories' (SNL's) role in supporting the U.S. Department of Energy's (DOE's) statutory missions and operations, a statement of the purpose and need for the Department's action, a description of DOE missions for SNL, an overview of the alternatives to be considered, and a review of the decisions that the DOE will make based in part on the findings in this Site-Wide Environmental Impact Statement (SWEIS) in accordance with the National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] Section 4321). In addition, it discusses the public participation process, related NEPA documents, and the organization and contents of the remaining chapters in the SWEIS.

1.1 INTRODUCTION

SNL is one of several national laboratories that support the DOE's statutory responsibilities for nuclear weapons research and design, development of other energy technologies, and basic scientific research. SNL is one of the largest laboratories in the world, with an annual budget of approximately $1.4 billion and a workforce of approximately 7,500 (DOE 1998j). SNL is composed of four geographically separated facilities: Albuquerque, New Mexico (SNL/NM); Tonopah, Nevada; Kauai, Hawaii; and Livermore, California (SNL/CA). This SWEIS focuses on SNL/NM. (A SWEIS was completed in 1992 for SNL/CA and Lawrence Livermore National Laboratory (DOE/EIS-0157) (DOE 1992f).) SNL/NM comprises approximately 8,800 ac of Federal land (owned by the DOE, U.S. Department of Defense [DoD], and U.S. Forest Service [USFS]) on Kirtland Air Force Base (KAFB) southeast of the city of Albuquerque (Figure 1.1–1) (SNL/NM 1997a). SNL/NM shares KAFB with other Federal agencies, primarily the U.S. Air Force (USAF) and the USFS. The USAF is a cooperating agency in the preparation of the SWEIS.

The DOE has prepared the SWEIS to examine the environmental impacts associated with three alternatives for SNL/NM's continued operation (see Section 1.2 and Chapter 3 for additional information regarding the alternatives). In the SWEIS, the DOE describes the consequences, both onsite and offsite, of ongoing and proposed SNL/NM operations and compares the potential consequences to three alternative levels of future operations.

DOE activities at the national laboratories and production facilities are known as mission lines. In the DOE *Strategic Plan*, mission lines are also known as business lines. Descriptions of DOE mission/business lines follow (DOE 1997c):

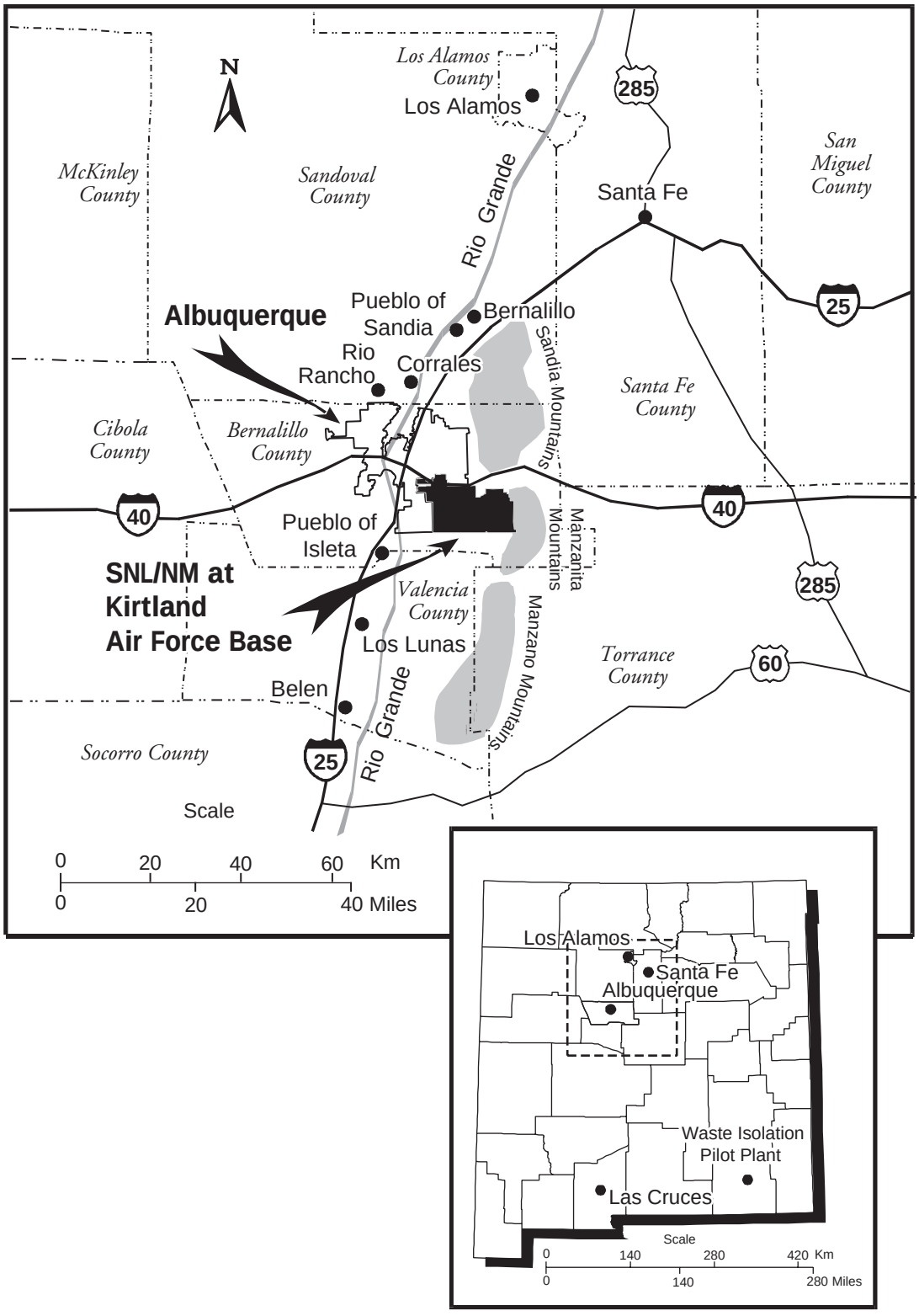
The Importance of SNL's National Security Role

The continuing need for SNL to support the DOE's national security mission line was confirmed by President Clinton, who stated, ***"...to meet the challenge of ensuring confidence in the safety and reliability of our stockpile, I have concluded that the continued vitality of all three DOE nuclear weapons laboratories will be essential."*** Statement by the President: Future of Major Federal Laboratories (The White House 1995).

- *National Security*—effectively support and maintain a safe, secure, and reliable enduring stockpile of nuclear weapons without nuclear testing; safely dismantle and dispose of excess nuclear weapons; and provide technical leadership for national and global nonproliferation and nuclear safety activities.
- *Energy Resources*—ensure adequate supplies of clean energy; reduce U.S. vulnerability to supply disruptions; encourage efficiency and advance alternative and renewable energy technologies; and increase energy choices for all consumers.

The DOE Mission Statement

To foster a secure and reliable energy system that is environmentally and economically sustainable, to be a responsible steward of the nation's nuclear weapons, to clean up our own facilities, and to support continued United States leadership in science and technology. (DOE 1996e)



Source: SNL/NM 1997j

Figure 1.1–1. SNL/NM, KAFB, and Surrounding Region

SNL/NM is located within the boundaries of KAFB, southeast of Albuquerque in Bernalillo county.

- *Environmental Quality*—reduce the environment, safety, and health risks and threats from DOE facilities and materials; safely and permanently dispose of civilian spent nuclear fuel and defense-related radioactive waste; and develop the technologies and institutions required for solving domestic and international environmental problems.
- *Science and Technology*—combine the unique resources of the Department's laboratories and the nation's universities to maintain leadership in basic research and to advance scientific knowledge; focus applied research and technology development in support of the Department's mission lines; contribute to the nation's science and mathematics education; and deliver relevant scientific and technical information.

1.2 PURPOSE AND NEED FOR AGENCY ACTION

The DOE needs to continue to meet its responsibilities for national security, energy resources, environmental quality, and science and technology. These responsibilities are met, in part, by national laboratories, of which SNL is one. The primary purpose for SNL is to serve as a national resource for scientific, technical, and engineering expertise, with a special focus on national security. The DOE needs to continue to fulfill its responsibilities as mandated by statute, Presidential Decision Directive (PDD), and congressional authorization and appropriation. The DOE goal in meeting these responsibilities is to do so in a manner that protects human health and the environment.

DOE missions for SNL have evolved over time in response to national needs. When assigning missions to SNL, the DOE considers many factors, including PDDs; the *National Defense Authorization Act of 1994* (Public Law 103-160); the DoD Nuclear Posture Review; and treaties, both implemented and proposed, including the Nuclear Nonproliferation Treaty, Strategic Arms Reduction Treaty (START) I, proposed START II, and the proposed Comprehensive Test Ban Treaty. Following are specialized capabilities SNL/NM provides in support of the Department's mission lines:

- science-based performance and reliability testing and computer-based modeling of nuclear components;
- production of nonnuclear components;
- production of neutron generators;
- materials science, including studying behavior of materials under high temperature and pressure;
- engineering and high-energy physics;
- high explosives research and development (R&D) and testing;
- microelectronics and photonics research;
- medical isotopes production; and
- radiation effects experimentation and accelerator operations.

For additional discussion of SNL/NM's support of DOE mission lines, see Section 2.1.

SWEIS Terminology

Mission	DOE's mission is to foster a secure and reliable energy system that is environmentally and economically sustainable, to be a responsible steward of the nation's nuclear weapons, to clean up its facilities, and to support continued United States leadership in science and technology.
Mission Lines	The DOE accomplishes its major responsibilities by assigning groups or types of activities (National Security, Energy Resources, Environmental Quality, Science and Technology) to its system of national laboratories and production facilities.
Programs	The DOE is organized into Program Offices. Each has a primary responsibility within one of the four DOE mission lines. The Program Offices provide funding and direction for activities at DOE facilities. Similar, coordinated sets of activities that meet Program Office responsibilities are referred to as programs. Programs are usually long-term efforts with broad goals or requirements.
Capabilities	The combination of equipment, facilities, infrastructure, and expertise required to implement mission assignments.

Description of Alternatives

No Action Ongoing DOE and interagency programs and activities at SNL/NM would continue the status quo, that is, operating at planned levels as reflected in current DOE management plans. In some cases, these planned levels include increases over today's operating levels. This would also include any recent activities that have already been approved by DOE and have existing NEPA documentation.

Expanded Operations DOE and interagency programs and activities at SNL/NM would increase to the highest reasonable activity levels that could be supported by current facilities and the potential expansion and construction of new facilities for specifically identified future actions.

Reduced Operations DOE and interagency programs and activities at SNL/NM would be reduced to the minimum level of operations needed to maintain SNL/NM facilities and equipment in an operational readiness mode.

1.3 PROPOSED ACTION AND ALTERNATIVES

The DOE proposes to continue operating SNL and managing its resources in a manner that meets evolving DOE mission lines and that responds to the concerns of affected and interested individuals and agencies.

The DOE identified three alternatives—No Action, Expanded Operations, and Reduced Operations—that would meet its purpose and need for agency action and support existing and potential future program-related activities at SNL/NM. The Notice of Intent (NOI) (62 Federal Register [FR] 29332) proposed that the first two alternatives be considered in the SWEIS (see Chapter 14); however, a third alternative, the Reduced Operations Alternative, was added to show a broader range of alternatives and respond to comments received from the public during the scoping process (Section 1.7). The SWEIS analyzes the environmental impacts of activities at SNL/NM associated with these three alternatives, as well as activities common to all alternatives including maintenance support and material management. The alternatives are more fully described in Chapter 3.

1.4 OBJECTIVE OF THE SWEIS

In the SWEIS, the DOE is examining the environmental impacts of the three alternatives for the continued operation of the laboratory. The objective of the SWEIS is to provide the DOE, other agencies, and the public with the following:

- descriptions of the affected environment, current operation, and potential impacts associated with the continued operation of SNL/NM;
- sufficient information to facilitate routine decisions by DOE regarding verification of operational status;
- a document that can be used for tiering (linking) NEPA analyses for future proposed actions, to eliminate repetitive discussions of similar issues and focus on the actual issues ready for decisions at each level of environmental review; and
- an understanding of SNL/NM's contribution to cumulative environmental impacts in the context of KAFB, other DOE activities at the site, and other activities in the Albuquerque area.

The last site-wide NEPA document for SNL/NM was prepared in 1977 (ERDA 1977). Since that time, site programs and activity levels have changed. Recently, the DOE has made programmatic decisions on the *Final Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DOE 1996a), the Final Waste Management Programmatic Environmental Impact Statement (DOE 1997i), the *Medical Isotopes Production Project: Molybdenum-99 and Related Isotopes Environmental Impact Statement* (DOE 1996b), and the *Nonnuclear Consolidation Environmental Assessment* (DOE/EA-0792) (DOE 1993c). Based on these changes and programmatic decisions, the DOE decided that a thorough environmental analysis was needed to describe impacts of ongoing SNL/NM operations.

1.5 DECISIONS TO BE SUPPORTED BY THE SWEIS

The SWEIS will be used to support DOE decisions on the levels of operations at SNL/NM, as well as serving as a basis for tiering future NEPA analyses and decisions regarding specific activities, as needed.

No sooner than 30 days after the final SWEIS is issued, the DOE will consider preparing a Record of Decision

(ROD). The ROD will contain the DOE's decisions on future operating levels for SNL/NM. In the ROD, the DOE will explain all factors, including environmental impacts, that the Department considered in reaching its decision and identify the environmentally preferable alternative or alternatives. The DOE may select one of the three alternatives or a combination of the alternatives analyzed in the SWEIS. If mitigation measures, monitoring, or other conditions are adopted as part of the DOE decision, these, too, will be summarized in the ROD.

1.6 PROJECTS UNDER CONSIDERATION

The following five projects are under consideration, but have not been included in this NEPA process because they are not ripe for decision-making. Separate NEPA review of each would be conducted before implementation of these projects.

- *X-1 Advanced Radiation Source*—an accelerator envisioned to generate X-ray outputs far greater than those that can be generated on the SNL/NM Z-machine or the ZX machine. The X-1 would enable a comprehensive range of weapon research activities, made possible by achievement of high fusion yield. Four potential alternate locations for this facility, including SNL/NM, were outlined in the Final PEIS for Stockpile Stewardship and Management. However, pre-conceptual design on this project is stopped at this time, and the DOE does not know whether it will propose to pursue the project.
- *ZX*—a concept for a ZX experimental facility is under discussion that would provide a new X-ray source for high-energy density R&D and weapon effects testing. This facility would entail modifications to facilities in Technical Area (TA)-IV. The ZX would provide an increase in SNL/NM capabilities for stockpile stewardship studies. In concept, this facility would use existing facilities and infrastructure in TA-IV, but would require an additional building to house the pulsed-power accelerator and experimental area. The ZX would produce a significant increase in soft X-ray energy output (up to 7 MJ) per shot. Target materials would be similar to those used or planned for the Z facility.
- *Annular Core Pulse Reactor-II*—a proposed reactor that would use the same fundamental design as the existing Annular Core Research Reactor (ACRR) facility. This reactor could be used for defense program-related testing using the uranium oxide-beryllium oxide fuel from the existing ACRR. This facility could be constructed in TA-V. A potential scenario for operation of such a reactor is analyzed under the Expanded Operations Alternative, but would require separate NEPA review if the DOE proposes pursuing the project.
- *ACRR-medical isotopes production privatization*—The DOE could decide to privatize its medical isotopes production in the future.
- *DOE-owned portion of a local research park*—86 ac of undeveloped DOE land adjacent to the Sandia Science and Technology Park may be developed in the future. The entire research park comprises approximately 200 ac, and various public and private entities are involved in the development activities. This project has not been analyzed in this SWEIS, but is described in Section 6.4.1.

1.7 PUBLIC PARTICIPATION

Public participation is integral to the preparation of the SWEIS. This section summarizes the issues and concerns that were identified during the public scoping process.

1.7.1 Scoping Process

Scoping is a process for determining the range of issues to be addressed in an environmental impact statement (EIS) and for identifying significant issues associated with the alternatives (40 Code of Federal Regulations §1501.7). The objectives of the scoping process are to notify interested persons, agencies, and other groups about the proposed action and the alternatives being considered; solicit comments about environmental issues, alternatives for the proposed action, and other items of interest; and consider those comments in the preparation of the SWEIS.

Scoping for the SWEIS consisted of both internal DOE scoping and external public scoping processes. The internal DOE scoping process began with working groups comprised of DOE managers and SNL/NM laboratory managers. The external scoping process period began after the publication of the NOI (62 FR 29332) on May 30, 1997, and continued until July 14, 1997. The purpose of the NOI was to notify the public that the DOE was intending to prepare a SWEIS on SNL/NM operations and invite other Federal agencies, Native American tribes, state and local governments, and the general public to participate in the scoping process. The NOI also presented background information on

SNL/NM and preliminary alternatives and issues identified through the internal scoping process.

Two scoping meetings for the SWEIS were held for the general public on June 23, 1997, at the University of New Mexico Continuing Education Center in Albuquerque, New Mexico. At these meetings, the DOE presented information on its proposal to prepare the SWEIS and the alternatives that were to be analyzed. The public was invited to present oral and/or written comments at the scoping meetings or by telephone by way of a toll-free number. Written comments could also be submitted by mail, facsimile, or electronic mail.

1.7.2 Summary of Scoping Issues and Concerns

During the public scoping process, 29 individuals and organizations either submitted requests for information or made oral or written comments. These comments, summarized in Table 1.7–1, were sorted based on the organization of the SWEIS. All of these comments have been reviewed and considered at various stages during the preparation of the SWEIS. Many are explicitly addressed in the pertinent sections of the first seven chapters of the SWEIS.

1.8 RELATED NEPA DOCUMENTS

The following NEPA documents analyzed ongoing programs and activities at SNL/NM:

- Final *Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DOE/EIS 0236-F) (DOE 1996a).
- Final *Waste Management Programmatic Environmental Impact Statement for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste* (DOE/EIS-0200-F) (DOE 1997i).
- *Medical Isotopes Production Project: Molybdenum-99 and Related Isotopes Environmental Impact Statement* (DOE/EIS-0249-F) (DOE 1996b).
- *Nonnuclear Consolidation Environmental Assessment* (DOE/EA-0792) (DOE 1993c).
- *Environmental Assessment of the Environmental Restoration Project at Sandia National Laboratories/New Mexico* (DOE/EA-1140) (DOE 1996c).
- Final *Rapid Reactivation Project Environmental Assessment* (DOE/EA-1264) (DOE 1999a).
- *Environmental Assessment of the Radioactive and Mixed Waste Management Facility* (DOE/EA-0466) (DOE 1993a).
- *Environmental Assessment for Operations, Upgrades, and Modifications in SNL/NM Technical Area-IV* (DOE/EA-1153) (DOE 1996g).
- *Environmental Assessment for the Processing and Environmental Technology Laboratory (PETL)* (DOE/EA-0945) (DOE 1995d).
- *Neutron Generator/Switch Tube Prototyping Relocation Environmental Assessment* (DOE/EA-0879) (DOE 1994a).

1.8.1 *Stockpile Stewardship and Management Programmatic Environmental Impact Statement* (DOE/EIS-0236-F)

The DOE prepared the Stockpile Stewardship and Management (SSM) Programmatic Environmental Impact Statement (PEIS) and evaluated stockpile stewardship activities required to maintain a high level of confidence in the safety, reliability, and performance of nuclear weapons in the absence of underground testing and to be prepared to test weapons if directed by the President (DOE 1996a). Stockpile management activities include maintenance, evaluation, repair, or replacement of weapons in existing stockpiles.

The SSM PEIS examined the existing basic capabilities of the DOE laboratory and industrial complex, including SNL. The ROD for the PEIS determined SNL would continue as one of three weapons laboratories possessing most of the core intellectual and technical competencies of the U.S. in nuclear weapons.

1.8.2 Final *Waste Management Programmatic Environmental Impact Statement for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste* (DOE/EIS-0200-F)

In the Waste Management Programmatic Environmental Impact Statement (WM PEIS), the DOE evaluated the environmental impacts of alternatives for managing five types of radioactive and/or hazardous waste generated by defense and research activities at a variety of DOE sites around the U.S. SNL/NM manages four of the five waste types: low-level waste (LLW), low-level mixed waste (LLMW), transuranic (TRU) waste, and hazardous waste. The DOE decided on January 23, 1998, that

Table 1.7–1. Summary Public Scoping Comments

COMMENT CATEGORY/ RESOURCE AREA	COMMENT
General	Discuss the effects of Sandia National Laboratories/New Mexico (SNL/NM) on the environment.
	Examine current and future energy requirements and conservation potential.
	What are your proposed activities now and 10 years from now?
Alternatives	Return all or part of the withdrawn U.S. Forest Service lands to public use.
	Consider zero production.
	Evaluate neutron generator production if manufactured at a higher level than indicated in the Nonnuclear Consolidation Environmental Assessment (EA).
	Consider reduced operations.
	Consider relocating and/or outsourcing of some current activities.
	Consider closure of SNL/NM.
	Continue some operations and increase/decrease others.
	Concern was expressed about the DOE s objectivity in defining minimum operations.
	Expand renewable energy, energy efficiency, and waste management research facilities.
	Dedicate vast unused lands owned by SNL as an Environmental Research Park.
	Expand some activities by making them available to other Federal agencies and move other activities that are underutilized to some other location.
	Broaden scope to anticipate research and development of new technologies to ensure leading-edge competency at SNL.
Land Use	Give full consideration of the use and impacts to U.S. Forest Service land.
	Consider impacts from testing/operations on land use, including tribal lands.
Geology	The potential for seismic activity along earthquake faults in the Manzanos makes the Manzano facility unsuited for nuclear storage.
Water Resources	Discuss water use, conservation, and cleanup.
	Consider the effects of testing on water in the East Mountain area.
	SNL should expand its research on wastewater treatment and water reuse technologies.
	Studies must include effects of an accident on groundwater quality.
	What impact will waste discharges to groundwater have on Isleta, and what impact will current and future surface water discharge have on the Rio Grande?
	Determine the extent of groundwater contamination.
	Is there a groundwater monitoring program in place?

Table 1.7–1. Summary Public Scoping Comments (continued)

COMMENT CATEGORY/ RESOURCE AREA	COMMENT
Water Resources (continued)	What is the current and future water use, and what is its impact on the Albuquerque Basin?
	How many acre feet of water rights do you currently have? Do you anticipate purchasing more in the future?
	Provide data on the present number of wells, including depth, water quantity, and water quality. Will more wells be needed?
	Is surface water currently used, including from the Rio Grande? Will it be used in the future?
	Is there any surface water contamination?
	Is there a surface water monitoring program in place?
	Consider implication of traffic associated with Sandia and Kirtland Air Force Base (KAFB) on water resources.
Biological Resources	Consider impacts on migratory birds such as the burrowing owl and gray vireo.
	Evaluate any research involving the capture and rendering of animals on KAFB for chemical or other analysis.
	What are the types of wildlife on your lands and how will they be impacted by future activities? If they migrate, where would they go?
	Have there been any tissue studies performed on any of the wildlife to determine if they have chemical concentrations that might be harmful to humans?
Cultural and Religious	Consider impacts to Native American archaeological sites and artifacts.
	Evaluate how impacts to cultural resources and properties, which may be historically significant, will be minimized.
	Full consideration must be given to Native American cultural and religious sites.
	Address cumulative impacts to traditional cultural properties.
	Consideration should be given to loss of access for Pueblo of Isleta to traditional cultural properties.
	A full ethnographic survey of impacted lands should be conducted.
Air Quality	Air quality must be addressed openly, otherwise public suspicion is fostered.
	Impacts of the open burn facility on the adjacent public use areas and the East Mountain area, including black smoke and forest fires, must be considered.
	Air conformity issues related to onsite transportation must be considered.
	Air conformity issues related to offsite transportation must be considered.
	Consider the cumulative impacts to Pueblo of Isleta due to discharges of hazardous air pollutants, including radionuclides.

Table 1.7–1. Summary Public Scoping Comments (continued)

COMMENT CATEGORY/ RESOURCE AREA	COMMENT
Air Quality (continued)	How many air pollutants are currently emitted and how will they be increased if activities are expanded?
Health and Safety	Could there be an increased incidence of thyroid cancer in the nearby community due to operation on KAFB?
	Have SNL/NM operations increased the incidence of child deformities?
	What is the current physical condition of the laboratories?
	How does the current condition of these laboratories compare with industry standards?
	What kind of environmental risk is posed by operating laboratories in their current physical condition?
	Are there criteria to ensure that a lab operation is appropriate to the condition of the lab?
	Is there a real option for a researcher or lab manager to stop work in a lab because it is unsafe?
	How has the maintenance or replacement budget for the individual labs fared and what is its future?
	The integrity of radioactive waste storage areas has to be examined to prevent environmental health hazards.
	Risks to surrounding neighborhoods in the case of an accident need to be studied.
	Cleanup standards for U.S. Forest Service land must consider ecological risks, not just the industrial human health cleanup standard.
	What types and quantities of nuclear materials and chemicals are used at SNL/NM?
	Does SNL/NM have an emergency response plan in place in the event of an emergency, and is the lab prepared for an evacuation if necessary?
	Are employees trained to handle a nuclear and/or chemical emergency?
	What are the potential public and worker exposures to radiological and/or hazardous materials?
Transportation	How can SNL/NM assist in developing more efficient, less intrusive transportation corridors?
	In what ways can SNL/NM assist in implementing a Southeast Corridor bypass?
	Discuss the effects of onsite transportation of radioactive and hazardous materials and wastes on the site workforce and the general public.
	Discuss impacts related to offsite transportation of radioactive and hazardous materials and wastes.
	Address the impact of SNL operations in relation to city and county policies regarding transportation planning.
	Is it in the best interest of the community to transport mixed waste to SNL/NM for treatment?

Table 1.7–1. Summary Public Scoping Comments (continued)

COMMENT CATEGORY/ RESOURCE AREA	COMMENT
Transportation (continued)	Will nuclear materials and chemicals be transported via Interstate 25 and the railroad?
Noise	Concerns were expressed about noise from explosions that can be felt and cause structural damage.
Socioeconomics	How can SNL/NM assist local communities in improving housing and services in the neighboring areas?
	Consider more employment opportunities for people whose lives and legacies are invested in New Mexico.
	Recognize the East Mountain area as an impacted community from SNL/NM activities.
	SNL/NM has had beneficial socioeconomic impacts on the Albuquerque area including contributions to the economy, establishment of businesses, as well as research, development, and technical support.
	Consider the economic effects of SNL/NM on the surrounding community and Isleta Pueblo.
	Address the impact of SNL operations in relation to city and county policies regarding growth management.
	How many Native Americans are employed at the laboratories?
Environmental Justice	Consider offsite transportation impacts to any disadvantaged groups.
	Consider impacts to disadvantaged populations or Native American interests.
Analysis of Impacts	Analyze direct impacts, as well as cumulative impacts.
	Consider impacts to U.S. Department of Energy (DOE) facilities not located in Technical Areas-I, -II, -III, -IV, and -V and Coyote Canyon.
	Consider the contribution of the Corrective Action Management Unit (CAMU) when evaluating cumulative impacts.
	To properly evaluate cumulative impacts, analyze remaining activities (other than CAMU) of the Environmental Restoration Project.
	Document all environmental impacts, as well as cumulative impacts, of SNL, KAFB, and associated facilities using Federal government lands, including U.S. Forest Service lands.
	The Site-Wide Environmental Impact Statement (SWEIS) cannot depend on the analyses in the Stockpile Stewardship and Management Programmatic Environmental Impact Statement (PEIS) and the Waste Management PEIS.
	Consider cumulative impacts to Pueblo of Isleta lands.
Environmental Restoration/Waste and Waste Management	Confirm the existence of unexploded ordinance previously reported by the U.S. Department of Defense (DoD).
	How has waste handling been improved?
	What is being done to detect hazardous plastic hardeners that have been buried near the Manzano facility?

Table 1.7–1. Summary Public Scoping Comments (continued)

COMMENT CATEGORY/ RESOURCE AREA	COMMENT
Environmental Restoration/Waste and Waste Management (continued)	The DOE needs to include thorough studies of potential cleanup sites and develop implementation strategies for cleanup of waste storage facilities.
	Studies must include effects of contamination on soils.
	If Mesa del Sol is contaminated from any SNL/NM sources, SNL/NM has a duty to clean it up.
	When considering returning U.S. Forest Service land to public access, the necessary decontamination and decommissioning must be carried out.
	Concerns relating to the Medical Isotope Production project need to be addressed including the life of the project, where and how spent fuel rods will be stored, how many spent fuel rods will be generated, has the disposal cost been considered, and which DOE program would pay for it.
	Consider impacts to Isleta property from soil contamination due to waste discharges.
	Consider heavy metal and depleted uranium contamination from overshot and explosives debris.
	What are current waste management practices, and are hazardous materials currently stored or disposed of onsite?
Regulatory Compliance	Consider SNL/NM s and KAFB s compliance with environmental laws, including the *Clean Air Act* and *Clean Water Act*.
	A study of Native American traditional cultural properties on KAFB and the U.S. Forest Service withdrawn land must consider not only the *National Historic Preservation Act*, but also the relevant aspects of the *American Indian Religious Freedoms Act*.
Public Involvement	Make technical data more available, including by computer access.
	Public involvement and input must be considered.
	There should be total public disclosure of activities.
	Information should be disseminated to the local Hispanic community and be available in Spanish.
	Copies of *National Environmental Policy Act* (NEPA) documents and supporting analyses should be available to the public for independent review.
	All comments, DOE responses, and other documents should be available on the Internet.
	Will there be public participation meetings?
	A work plan or some other similar document should be made available for public comment by the Fall of 1997 that would identify schedules, alternatives, facilities to be analyzed, contractors preparing the SWEIS, roles of other Federal agencies, and other NEPA documents the DOE intends to prepare during preparation of the SWEIS.
	The DOE should actively cooperate with and involve the Pueblo of Isleta in the preparation of the draft SWEIS.

Table 1.7–1. Summary Public Scoping Comments (concluded)

COMMENT CATEGORY/ RESOURCE AREA	COMMENT
Public Involvement (continued)	The DOE should provide for ongoing public input during the SWEIS process and keep the public informed on SWEIS progress.
	The Open House format of the June 23, 1997, public meeting permitted good communication and should be continued.
	The DOE should demonstrate during the NEPA process a respectful, continuing government-to-government relationship with the Pueblo of Isleta.
Mission, Policy and Management	Technology transfer between SNL/NM and Bernalillo county and local governments should continue to be encouraged.
	SNL/NM should stop open burn tests and any and all reclamation of plutonium pits from warheads.
	The DOE should set time limits for each constituent part of the SWEIS with the total time not to exceed 15 months.
	SNL/NM is a good place to work.
	Concern was expressed over ethics of experiments such as human radiation experiments on people living around SNL/NM.
	The DOE should reassign SNL/NM s mission statement and make it concentrate on energy and material efficiency, renewable resource research, waste management and recycling, and development of biodegradable and reusable materials.
	SNL/NM should make a commitment to engage in an arms control program, work on weapons disarmament, and seek improvements to the recent test-ban agreement.
	The SWEIS should be extended to cover business incubator activities.
	In the event of a war, would SNL/NM be a target?
Document Preparation	It should be explained in the SWEIS how the DOE will ensure that all proposed actions will receive the appropriate level of NEPA review after the document is completed.
	A description of how the DOE intends to condition funding for mitigation, if proposed, and a progress report on mitigation should be included in the SWEIS or a mitigation action plan.
	The many other project-specific NEPA documents that SNL/NM has prepared, other than the two called out in the Notice of Intent, should be considered.
	Any relationship between SNL/NM and contractors selected to prepare the SWEIS should be described in the disclosure statement.
	A classified appendix is not warranted.

Source: HNUS 1997

SNL/NM TRU waste would be sent to Los Alamos National Laboratory for storage pending disposal (63 FR 3629), and on August 5, 1998, that SNL/NM would continue to ship its hazardous waste offsite for treatment (DOE 1998m). The DOE has not yet decided on a national strategy for treatment and disposal of LLW and LLMW; but under the preferred alternatives for both waste types, SNL/NM would treat its own waste onsite, then ship it offsite for disposal.

1.8.3 *Medical Isotopes Production Project Environmental Impact Statement* (DOE/EIS-0249-F)

The DOE prepared the Medical Isotopes Production Project (MIPP) Environmental Impact Statement (EIS) and evaluated the domestic production of molybdenum-99 and related medical isotopes (DOE 1996b). The MIPP EIS's five alternatives regarding the production of a reliable domestic supply of molybdenum-99 included a baseline production level of 10 to 30 percent of the current U.S. demand and the capability to increase production to supply 100 percent of the U.S. demand.

The MIPP EIS evaluated the ACRR capabilities, target fabrication, target processing at the Hot Cell Facility, and waste management capabilities at SNL/NM. The ROD for the MIPP EIS determined SNL/NM would become a domestic producer and supplier of molybdenum-99 (61 FR 48921).

1.8.4 *Nonnuclear Consolidation Environmental Assessment* (DOE/EA-0792)

The DOE prepared the *Nonnuclear Consolidation Environmental Assessment* (EA) and evaluated the consolidation of nonnuclear component manufacturing, storage, and surveillance functions (DOE 1993c). The EA discussed six categories of capabilities: electrical/mechanical; tritium handling; detonation; beryllium technology and pit support; neutron generators, cap assemblies, and batteries; and special products.

The Finding of No Significant Impact for the EA determined the significance of impacts for the continuation of SNL/NM's existing research, development, testing, and prototyping capability, which would be augmented to provide the necessary fabrication capability for future neutron generators, cap assemblies, and other nonnuclear components (DOE 1993c).

1.8.5 *Environmental Assessment of the Environmental Restoration Project at SNL/NM* (DOE/EA-1140)

The DOE prepared the Environmental Restoration (ER) Project EA and Finding of No Significant Impact (FONSI). The EA evaluated the environmental impacts of site restoration characterization and waste cleanup activities (corrective actions) at SNL/NM (DOE 1996c). The corrective actions included a range of waste treatment options at a currently estimated 182 ER Project sites. The corrective measures implement treatment technologies that are reasonable, feasible, and capable of being implemented to achieve regulatory compliance.

1.8.6 *Rapid Reactivation Project Environmental Assessment* (DOE/EA-1264)

The Rapid Reactivation Project EA analyzed alternatives for continued neutron generator production. The DOE's FONSI covers the proposed alternative that increases the annual neutron generator production capacity from its current level of 600 to 2,000. Existing buildings and infrastructure would be used to the maximum extent possible to meet the additional production needs. The addition of approximately 26,290 gross square feet of facility space and other facility modifications would be necessary to achieve the proposed production capacity.

1.8.7 *Environmental Assessment of the Radioactive and Mixed Waste Management Facility* (DOE/EA-0466)

The DOE prepared the Radioactive and Mixed Waste Management Facility EA and FONSI for the proposed completion of construction and subsequent operation of the RMWMF in TA-III. The RMWMF was designed to receive, store, characterize, conduct limited bench-scale treatment of, repackage, and certify LLW and LLMW for shipment to an offsite disposal or treatment facility.

1.8.8 *Environmental Assessment for Operations, Upgrades, and Modifications in SNL/NM Technical Area-IV* (DOE/EA-1153)

The EA for Operations, Upgrades, and Modifications in SNL/NM Technical Area-IV and FONSI were prepared by the DOE for continuing existing operations, modifying an existing accelerator (Particle Beam Fusion Accelerator II) to support defense-related Z-pinch experiments, and constructing two transformer oil storage tanks to support the expansion of the Advanced Pulsed Power Research Module.

1.8.9 *Environmental Assessment for the Processing and Environmental Technology Laboratory (PETL)* (DOE/EA-0945)

In the EA for the PETL at SNL/NM, the DOE analyzed alternatives for the building and operation of the PETL. The DOE proposed constructing the PETL on KAFB and relocating operations from existing facilities to the new building in TA-I. The DOE issued a FONSI associated with the proposed alternative.

1.8.10 *Neutron Generator/Switch Tube Prototyping Relocation Environmental Assessment* (DOE/EA-0879)

The Neutron Generator/Switch Tube Prototyping Relocation EA analyzed two alternatives for expanded prototyping of neutron tubes, neutron generators, and switch tubes. The DOE's proposed action would relocate neutron tube, neutron generator, and switch tube prototyping operations from Buildings 891 and 878 to a Building 870 annex. A prototyping capability for electronic neutron generators would be established in Building 878. The DOE prepared a FONSI for this action.

1.9 COOPERATING AGENCIES

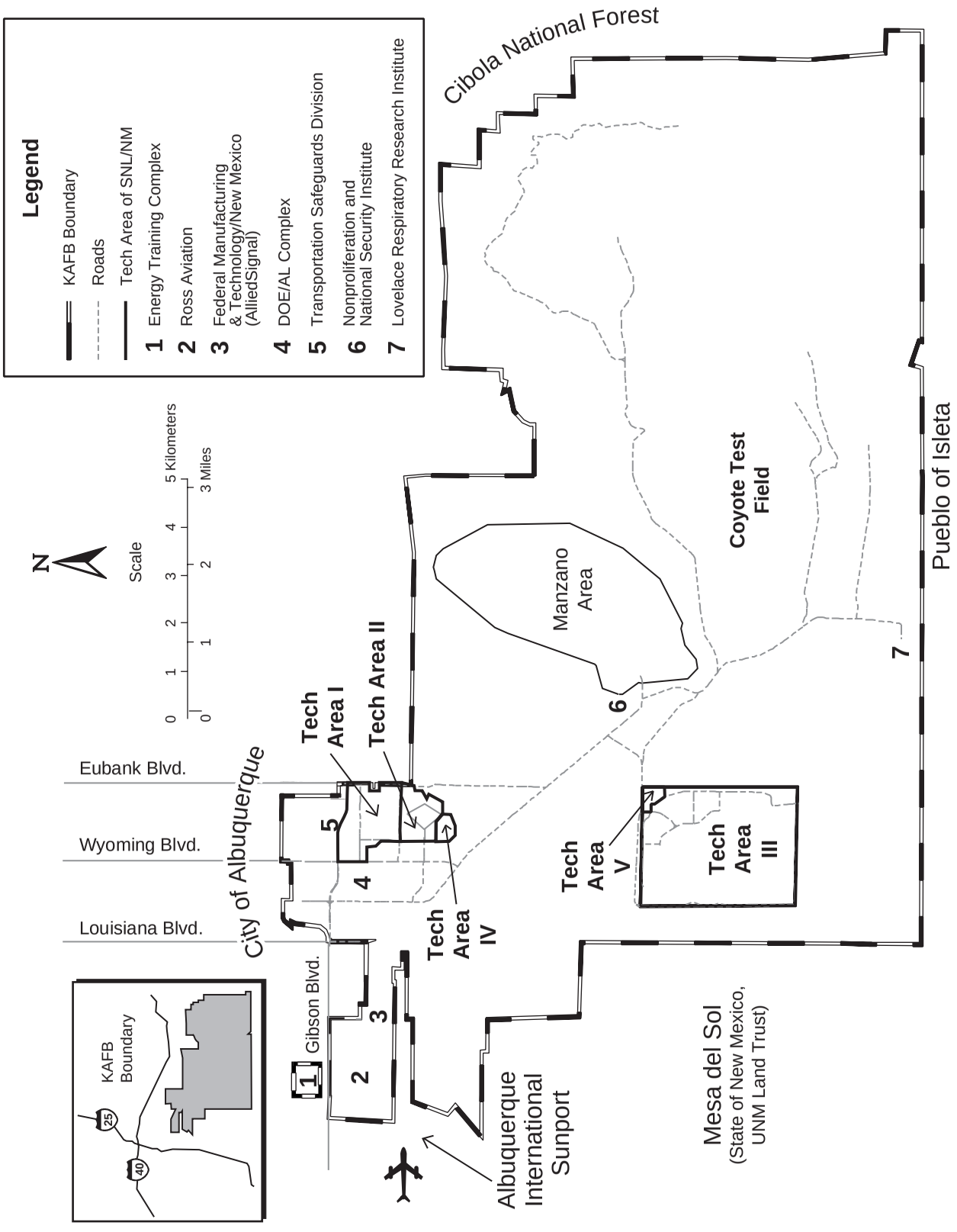
On May 30, 1997, the NOI announced the USAF as a cooperating agency because of the interdependence of KAFB and the DOE planning for SNL/NM. The USAF has participated in planning meetings, developing analytical methodologies and data projections, and reviewing analyses for and predecisional drafts of the SWEIS.

1.10 OTHER DOE OPERATIONS AT KAFB

In addition to SNL/NM, the following DOE-funded facilities are located on KAFB. The impacts from these facilities are not analyzed in Chapter 5 because they are not under the management of SNL. They are analyzed as part of cumulative effects in Chapter 6.

- The Lovelace Respiratory Research Institute, formerly the Inhalation Toxicology Research Institute, is a private business that leases space from the DOE. The Institute began operations in the 1960s as a research team for determining the long-term health impacts of inhaling radioactive particles. It has since become a recognized center for inhalation toxicology and related fields.
- The Nonproliferation and National Security Institute ensures the efficient and effective training of Safeguards and Security Division personnel from throughout the DOE who are, or might become, involved in the protection of materials and facilities vital to the nation's defense.
- The Transportation Safeguards Division (TSD) coordinates, implements, and operates the DOE Safeguards Program that transports special nuclear materials (SNM). The TSD coordinates and plans weapons distribution with the DoD and coordinates SNM shipments for all DOE field offices.
- Federal Manufacturing & Technology/ New Mexico, a division of AlliedSignal, is an applied science and engineering organization engaged in research, analysis, testing, and field operations. A major portion of this work is in the design, fabrication, and testing of electro-optic and recording systems for capturing fast transient signals.
- Ross Aviation is the DOE's support contractor providing air cargo and passenger service. Ross transports cargo between production plants, national laboratories, test sites, and military facilities and provides special passenger and cargo flights on request.
- The DOE's Albuquerque Operations Office complex houses DOE and contractor staff.
- The Energy Training Complex consists of classrooms for DOE training.

Figure 1.10–1 shows the approximate locations of these facilities. The above operations, along with KAFB activities, are discussed in more detail in Chapter 6.



Source: SNL/NM 1997j

Figure 1.10–1. Seven Additional DOE Facilities at KAFB

Other DOE-funded operations not related to SNL/NM are located within the boundaries of KAFB.

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